SAMPLING AND ANALYSIS PLAN
HAZARDOUS MATERIALS ASSESSMENT

FORMER WALMART
4070 EAST HARBOR ROAD, PORT CLINTON, OHIO 43452

SME Project Number: 066708.00.004.010

June 10, 2015

Prepared for Ottawa County, Ohio, Cooperative Agreement # BF-00E01066-0

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1.0 INTRODUCTION

Ottawa County (the County) has received a United States Environmental Protection Agency (USEPA) Brownfields Assessment Grant for hazardous materials in the amount of $200,000. The County intends to support the redevelopment of the brownfield property located at 4070 East Harbor Road, Port Clinton, Ohio (the Property) through use of USEPA hazardous substances assessment grant funds. On June 8, 2015, USEPA confirmed eligibility for the County to conduct assessment activities at the Property. The general location of the Property is shown on Figure 1. The Property is located on the south side of East Harbor Road, east of Southeast Catawba Road, and consists of approximately 6.7 acres of land developed with an approximate 73,000 square-foot commercial retail building. The Property building is currently vacant, but was most recently used as a Walmart store.

Team members from SME, the environmental consultant for the County's grant project, prepared this Sampling and Analysis Plan (SAP) as a requirement of the USEPA brownfield grant program to use assessment grant funds to conduct a hazardous materials assessment of the building on the Property. The objective of the hazardous materials assessment is to provide information to assist in complying with applicable state and federal requirements related to hazardous materials inspection and abatement prior to building renovation activities. A description of the building, procedures for identifying homogenous areas of suspect asbestos-containing materials (ACMs), identifying suspect lead-bearing and cadmium-bearing paints, determining sample collection requirements, collecting samples of suspect homogeneous areas of ACMs and lead-bearing and cadmium-bearing paints, laboratory analyses of collected bulk samples, descriptions of data evaluation and reporting activities, and the estimated project schedule are presented in the following sections.

2.0 BUILDING DESCRIPTION AND PROPOSED ASSESSMENT

2.1 BUILDING DESCRIPTION

The building is an approximately 73,000 square foot, one-story, vacant, commercial building.

2.2 PLANNED BUILDING ASSESSMENT

The assessment activities described in this SAP are designed to characterize the types, quantities, and locations of ACMs and suspect lead-bearing and cadmium-bearing paints present in the building. This assessment will provide information to assist in complying with the USEPA requirements for inspection of buildings prior to demolition under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulations found in Title 40 of the Code of Federal Regulations, Part 61 (40 CFR Part 61). The assessment will also provide information to assist in complying with the Occupational Safety and Health Administration (OSHA) Asbestos Construction Standard (29 CFR 1926.1101) the OSHA Lead Exposure in Construction Standard (29 CFR 1926.62), and the OSHA Cadmium Construction Standard (29 CFR 1926.1127), regarding communication of hazards. The results of the hazardous materials assessment will provide information to support abatement of ACMs, as required to facilitate demolition of the building.

We will use staff members trained in accordance with USEPA requirements and accredited by the Ohio Department of Health (ODH) under the requirements of chapter 3710 of the Ohio Revised Code and chapter 3701-34 of the Ohio Administrative Code as an Asbestos Hazard Evaluation Specialists to complete the asbestos assessment activities. The assessment goals will be achieved by accomplishing the following specific activities:

- Obtain background information to determine the suspected presence and location of ACMs.
- Determine functional spaces within the building - building materials within distinct functional spaces will be assessed separately.
- Conduct a visual assessment - all accessible areas within the building will be visually assessed for suspect materials or products which are likely to contain asbestos.
- Determine homogeneous areas - suspect ACMs will be categorized into groups of thermal system insulation (TSI), surfacing material, or miscellaneous material that appear uniform in color and texture, i.e. homogeneous areas, to develop a sampling plan.
- Quantify suspect ACMs - the quantities of each homogeneous area of suspect ACM will be estimated.
- Conduct a visual inspection to identify the painted structural surfaces within the building.
- Collect samples of suspect ACMs and suspect lead-bearing and cadmium-bearing paint chip samples as outlined in Section 3.2 of this SAP.
- We will submit the building material samples to International Asbestos Testing Laboratories (IATL), a laboratory accredited by the American Industrial Hygiene Association (AIHA) and the National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP), for asbestos analysis via Polarized Light Microscopy (PLM).
- We will submit the paint chip samples to IATL for lead and cadmium analysis via atomic absorption spectrophotometry (AAS). IATL is also accredited for lead analysis under AIHA's Environmental Lead Laboratory Accreditation Program (ELLAP).

3.0 ASSESSMENT

The procedures used to identify suspect ACMs, lead-bearing and cadmium-bearing paints, and determine the required number and type of bulk asbestos samples and paint chip samples are discussed in this section.

3.1 IDENTIFICATION AND QUANTIFICATION OF SUSPECT ACMS AND LEAD-BEARING AND CADMIUM-BEARING PAINTS

Our assessment will consist of visually assessing areas within the building and on the building exterior for suspect ACMs and lead-bearing or cadmium-bearing paints. The assessment will include visually assessing accessible pipe chases, attics and crawl spaces, trenches, and spaces above ceilings and under carpets. SME's project team will enter each accessible functional space within the building, observe and assess the contents of each functional space, and record the estimated quantity of each homogeneous area of suspect ACM present in the space.

Based on the results of our visual assessment, we will collect bulk suspect ACM building material samples in relation to the quantity of materials present. The quantity of collected samples will be based on the homogeneous areas of suspect ACMs identified and the following protocol referenced by USEPA and OSHA regulations.

Type of Material	Size of Homogeneous Area	Minimum Number
Surfacing	<1,000 sq. ft.	3 samples
Surfacing	1,000-5,000 sq. ft.	5 samples
Surfacing	>5,000 sq. ft.	7 samples
Thermal system insulation	-	3 samples
Miscellaneous	Sufficient number to determine ACM or non-ACM	

Our project team will collect randomly distributed discrete chip samples of suspected lead-bearing and cadmium-bearing paints noted during the assessment. We will prepare standard forms to document the visual assessment and sampling. In addition, not-to-scale floor plans or sketches of the building will be used to graphically indicate the sample locations and sample ID numbers for samples of suspect ACMs and lead-bearing or cadmium-bearing paints collected during the assessment.

4.0 SAMPLE COLLECTION AND ANALYSIS

4.1 SAMPLING PROCEDURES AND METHODS

Bulk sample collection and waste management procedures and methods will be completed in accordance with SME's Standard Operating Procedures (SOPs) included in the project Quality Assurance Project Plan (QAPP) – SME SOP #20 and SME SOP #21.

4.2 LABORATORY ANALYSIS

We will submit the suspect ACM samples to IATL for analysis via Polarized Light Microscopy (PLM) to determine those materials that contain more than one percent (1%) asbestos by the visual estimation method. Sample results found to contain less than 10% asbestos via visual estimation method of the PLM will be further verified via the "Point Count Method" as defined by the Asbestos Hazard Emergency Response Act (AHERA) regulation (40 CFR Part 763). Laboratory testing and reporting protocols used or performed by IATL will be consistent with those described in the project QAPP.

We will submit the paint chip samples to IATL for atomic absorption spectrophotometry (AAS) analysis to determine if lead or cadmium are present and in what percentages if lead or cadmium are detected in the samples.

Laboratory testing and reporting protocols used or performed by IATL will be consistent with those described in the project QAPP.

5.0 DATA EVALUATION AND REPORTING

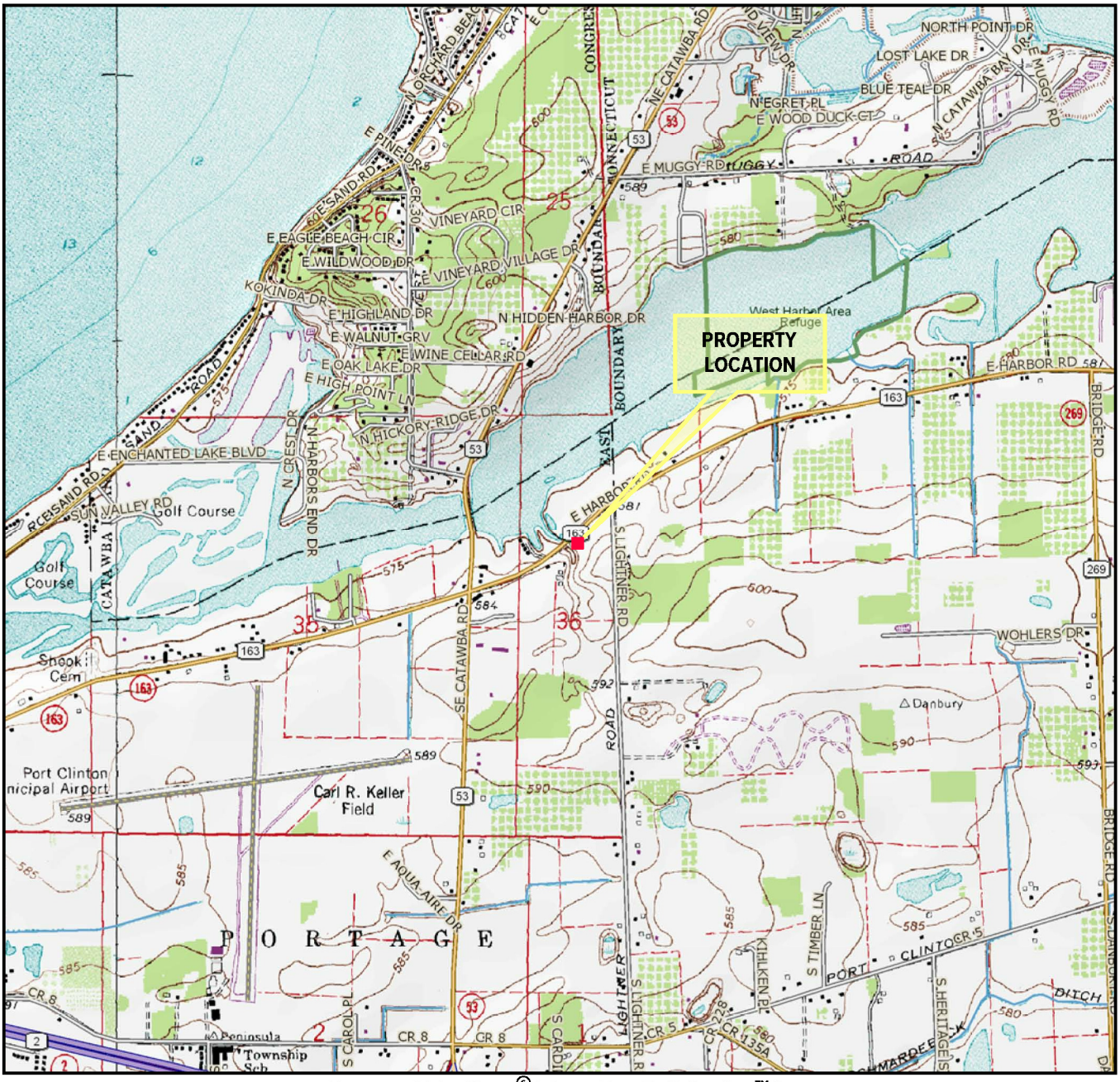
We will evaluate the data collected during this hazardous materials assessment as described in Section 4.0 – Data Verification/Validation and Usability of the project QAPP. Following data review, verification, and validation, we will prepare an assessment report. The report will include details of the activities performed, procedures followed, and results. The report will include sample location diagrams, tabulated analytical results, a copy of the laboratory analytical report for the samples collected, and a copy of the chain-of-custody (COC) records.

6.0 ESTIMATED SCHEDULE

The assessment activities described in this SAP will be implemented according to the schedule presented below. This schedule is in weeks relative to USEPA approval of the final SAP.

- Initial building assessment and sample collection — Week 1
- Laboratory analyses — Week 2
- Data evaluation and reporting — Week 4

FIGURES



Base map obtained from ©DeLorme Topo North America ™10.

LEGEND

■ APPROXIMATE PROPERTY LOCATION

USGS QUADRANGLE(s) REFERENCED
GYPSUM (OH) TOPO QUAD - 1980

No.	Revision Date		
		Date	06-05-15
		Drawn By	GM
		Designed By	AMW
		Scale	1" = 2000'
		Project	066708.00.004.010

PROPERTY LOCATION MAP
FORMER WALMART
4070 EAST HARBOR ROAD
PORT CLINTON, OHIO

SME
www.sme-usa.com

Figure No. 1

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